

CHRISTINE (G. M.)

*Reprint from
Haklennian*

THE SEQUELS OF TYPHOID FEVER

BY

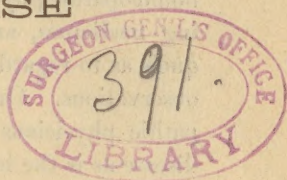
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WITH

NOTES ON A CASE

BY

HORACE F. IVINS, M.D.



DURING, or shortly after, convalescence from typhoid fever, there will occasionally occur disease-manifestations bearing to the original disease the relation of effect to cause. These results are known as sequels. Respecting scarlet-fever and diphtheria, these untoward results have been fairly well studied and are generally well comprehended. The sequels of typhoid fever do not, however, seem to have engaged quite the attention which their importance demands. The remark of frequent utterance among the laity, and occasionally among the profession, that a patient having typhoid fever will, if he recovers, be the healthier for having had the disease, needs considerable qualification, for in many instances the gravest possible conditions supervene on the subsidence of the fever.

In his "Toner lecture," Dr. W. W. Keen has exhaustively considered the surgical complications and sequels of typhus and typhoid fevers. To those physicians who have not read this lecture, or who have not paid special attention to this subject, Dr. Keen's article will furnish much valuable information. This author shows that diseases of the joints, œdema glottidis and necrosis of the cartilages of the larynx, gangrene of the extremities and other parts, fistulæ of various kinds, etc., are the surgical sequels most apt to occur after these fevers.

What is probably the best existing general consideration, from a médical standpoint, of the sequels of typhoid fever, is given by Dr.

presented by the author -

James C. Wilson in his estimable work on "The Continued Fevers." This article is likewise well worth a careful perusal.

In addition to these two references there are to be found here and there among medical books and journals other references of a more or less complete character, though none perhaps so thorough as those of Keen and Wilson. At the close of Dr. Keen's lecture will be found a large list of references to the literature on the subject of surgical sequels, but I know of no published medical list of like nature. Homœopathic medical works do not seem to contain much on the subject. I account for this partly on the ground that the homœopathic physician does not surcharge his patient with devitalizing medicines, and therefore does not so frequently meet with sequels as to regard it of sufficiently great importance to record his observations. On the other hand it is certainly true that the allopathic physicians are not so successful in curtailing or curing this disease as is the homœopathist, and that therefore the former more frequently meets with sequels and is called upon more often to write concerning them. In the allopathic practice many of the complications and sequels occurring result from the heroic character of the treatment. Though the homœopathic physician is ever ready to administer remedies in sufficiently large doses to cure the disease, the charge can not be laid at his door of forcing the action of medicines beyond their necessary degree of action. Homœopathy seeks to act upon the disease and then to withhold drug action, so that such parts of the system as are not affected by the disease will not be altered functionally or organically by the drug. Allopathy as practiced by the "old school" has not in the past observed this rule, and what little of it is observed to-day by them has been copied, without due credit, from homœopathy.

Complications and sequels occurring in the practice of homœopathic physicians are necessarily the result of some other cause than over drug-action. Accusations have been brought against the homœopathic physician of virtually administering no medicine at all, which, if it were true, would, we admit, account for the existence of some of the typhoid complications and sequels. Admitting, for a moment, this unfounded impeachment be true, the advantages of no treatment at all over the heroic treatment of the allopathic school, in such diseases as typhoid fever, are so manifest that the indictment fails to be of any force. They cannot even accuse allopathy of being responsible for all the complications and sequels which may occur in the course of, or following, the disease which it is treating. For

independent of the want of action, or of the over-action, of remedies, there appears to be a disposition on the part of the fever processes to set up changes of nutrition in the various parts of the body. Nor is it strange that such should take place, in view of the fact of the great tension under which the system of a typhoid or typhus fever patient is being constantly held. There are fevers in which the temperature reaches a higher point, but none in which for so long a time it is kept so high. In this respect, typhoid and typhus fevers are unique. The prolongation of a very high fever over a period of three or more weeks, with the consequent weakening of the heart and circulation, severe nervous strain, intense gastric and intestinal disturbances, frequent pulmonary, renal and other complications, constitute an array of active morbid processes not equalled, in kind or degree, by any other fever.

Under this severe tension not only do the various organs of the body become perturbed in function, but the various tissues become the seats of slow inflammatory changes, the powers of resistance are weakened, and that which in health and in most diseases can make no impression now is enabled to give rise to congestion, catarrhal and other inflammations, ulceration, embolism, etc.

Wilson says that the complications and sequels of typhoid fever fall into two classes: The first of these comprises those which are due to an unusual development of the pathological processes of the fever; the second, those occurrences not necessarily dependent upon the malady, but to which the condition of the patient renders him liable. In the first class Wilson includes perforation, peritonitis, rupture of the muscles, abscesses, parotitis, nephritis, various affections of the nervous system, venous congestions, hypostasis, œdema, thrombosis, embolism, infarction, etc. In the second class are included pneumonia, pleurisy, erysipelas, diphtheria, etc. This author then reviews in succession the following complications and sequels:

Edematous laryngitis, ulcerative laryngitis, and perichondrial laryngitis; necrosis of the nasal cartilages, bronchial catarrh, hypostatic congestion of the lungs, œdema of the lungs, hæmorrhagic infarcts, lobar pneumonia, acute miliary tuberculosis, pleurisy, dilatation of the heart ventricles, endo- and peri-carditis, ulceration of the tongue and of the buccal mucous membrane, catarrh of the mucous membrane of the pharynx and posterior nares, swelling of the parotid glands, jaundice, transitory albuminuria, hæmaturia, catarrh of the bladder, profuse or premature menstruation, herpes labialis, facial paralysis, hæmorrhages into the skin, boils and abscesses, bed-

sores, alopecia, malformation of the nails, effusion of blood, meningitis, feebleness of the intellect and attacks of mania, palsy, neuralgias and disturbances of sensation, deafness, paralysis of accommodation, amblyopic conditions, sloughing of the cornea, anæmia.

This list of sequels of typhoid fever is more than sufficient to indicate the wide scope of the divergences from the direct course of the disease that happen more or less frequently. Some of them are dependent upon actual tissue alteration, whilst others are consequent on an inability on the part of the system to make up for tissue waste. But, in addition to the general influence which the typhoid poison has upon the system, it evidently predilects a locality for the expenditure of its force, which locality soon becomes the seat of atrophic and other changes. Lesion of the solitary and agminated glands is, of course, a constant factor in typhoid fever. This makes the name "enteric" a more appropriate term for the disease than is "typhoid." But objections to this term have been urged on the ground that the intestinal lesions are sometimes secondary in gravity to those existing elsewhere as a result of the typhoid poison; and again, that Murchison was not correct in his statement that the agminated and solitary glands of the ileum are constantly and invariably diseased in typhoid fever. These objections seem, at first sight, to be valid,—the more so when it is borne in mind that often intestinal symptoms are very mild, while symptoms referable to other parts of the body are markedly severe, and that sometimes symptoms of intestinal lesion defy detection, the latter being demonstrable only *post-mortem*. All available evidence on the subject indicates that typhoid fever has a "definite anatomical lesion," and that its *loco in citus* is in the intestine. But what is the *rationale* of those cases which, as we have said, give rise to doubts that this is so? The explanation is as follows: The agminated and solitary glands of the ileum officiate for the rest of the body as guardians against the introduction of the typhoid poison. On its entrance into the intestine the poison finds that its further progress into the system is, in part or in whole, checked. If the amount of the poison is great and its virulence active, we find the intestinal symptoms proportionately prominent; but if the poison has been received into the bowel in small quantity, and its virulence moderate, the intestinal lesion is correspondingly mild; or the guardianship of the glands may be insufficient, and the poison thus finds it not a difficult matter to elude their vigilance. Other parts of the body then become the seat of the typhoid ravages, in which case the intestinal

symptoms are subordinate. This is probably the true explanation as to why certain cases of typhoid fever of short and calm duration, so far as the intestinal manifestations are concerned, have serious complications, or are quickly followed by grave and fatal sequels.

Coupling this theory of the cause of complications and sequels with that already given in the fore part of this paper, we have their causation satisfactorily comprehended.

Two questions of vast import are: Can we prevent complications and sequels occurring in typhoid fever? Will typhoid fever ever be robbed of the tendency it has to elude the vigilance of the physician whose science, art and care are each exercised to keep the action of the poison within the bounds of its characteristic sphere?

I will not attempt to answer these questions, except in a general way. As has been before stated, typhoid fever is more easily and certainly cured by homœopathic treatment than by that of the "old-school,"* which fact already gives a fair answer to the questions propounded. But even the most zealous homœopath will certainly not lay claim to a perfect immunity from sequels in typhoid fever, even under his most approved treatment; for, as we have pointed out, there are sequels, as well as complications, which are independent of the character of the treatment, but which have a direct relationship with the activity of the typhoid poison or the weakness and susceptibility of the system affected.

The appropriate use of medicine and the required administration of nutriment will do much to ward off a large percentage of these

* SIGNIFICANT FIGURES.—Those who think that homœopathy has no further victories to win are invited to consider these statistics, taken from the *Homœopathic World*. The recent typhoid epidemic at Melbourne afforded an opportunity for comparison of results at the different hospitals. We will give the figures of the three principal hospitals for the first three months of the year 1889:

	No. of beds.	No. of typhoid cases.	Deaths.	Percentage.
Melbourne Hospital, . . .	318	431	78	18.1
Alfred Hospital, . . .	144	324	50	15.4
Homœopathic Hospital, . .	60	305	22	7.2

Less than half died under homœopathic treatment than there did under allopathic, and, more than that, the patients were ill a much shorter time; for the Homœopathic Hospital, with its sixty beds, was able to treat almost as many patients as the other hospitals, with five times the amount of accommodation in the case of the Melbourne, and more than twice the amount in the case of the Alfred Hospital. How our allopathic friends will evade these facts is not known. The comparison is perfectly fair, and the legitimate conclusion is that homœopathy cures twice as many cases of typhoid fever as allopathy does.—*North Amer. Journ. of Hom.*, September, 1889.

undesired results. The early recognition of side-symptoms and the institution of the indicated treatment will often check them in their incipency.

No case of typhoid fever can be considered out of danger or cured until a long period has elapsed after the decline of the fever. The length of this period is not a fixed quantity, but differs in each case. During the active course of the fever, as well as during convalescence, the utmost watchfulness should be exercised for the detection of complicating, intercurrent and accidental events. "The eye should seize upon any hindered movements, even without pain, and no complaints of pain should fall upon a deaf ear, especially if it be in the throat, the belly-wall, the buttock, the hip-joint, the eyes or the toes. It may be the vagaries of a wandering mind. But it may also be, as we have seen, the herald of the greatest dangers, whose attacks may be entirely repelled or their force broked by heeding this timely warning."—(*Keen*.)

The following two cases are given to illustrate two forms of sequel. The one followed an attack of typhoid fever of unusual severity; the other followed closely on one of short and mild duration. The first is a not very rare form of sequel; but the second is very infrequent.

Periostitis.—Mrs. R., æt. 27, resident of Philadelphia, was taken ill at Atlantic City with what, for a time, it was difficult to differentiate between tuberculosis and typhoid fever. The diagnosis of typhoid fever was finally established, and the case was subsequently transferred from the care of an allopathic physician of the place to a homœopath. I remained the consultant with the second physician.

Delirium, angina pectoris, coccygodynia, cystic and urethral irritability, ulceration of the lower bowel, and other complications account for this long duration. During convalescence, which was rapid when it finally set in, there began the formation of a node on the anterior aspect of the tibia and one on a rib of the right side. The pain and swelling soon became very marked. Calc. fluor. was administered until a sinus opened, when the remedy was changed to silicea. At this writing, the leg is thoroughly well and the rib is fast becoming so.

LARYNGEAL TUMOR, PARALYSIS OF THE ABDUCTORS OF THE VOCAL CORDS.

CASE No. 2.—George P., æt. 18, came to my office on March 28th with headache, vertigo, and sore throat; pulse rapid, fever high and pains in the knees and arms. Diagnosis: Herpes of the tonsils.

Next day, he again came to the office with the herpetic eruption

fully developed, more fever and higher pulse. No symptoms of diphtheria, and apparently none of typhoid fever. The following day I went to see the patient at his house, and found him with the throat symptoms greatly relieved and the herpetic eruption better. In the evening the temperature was higher— 104° F.—and the bowels were loose. There were also tympanites, delirium, dry and brown tongue, and nose-bleed. The temperature reached the maximum of 104° on the 1st of the month, and remained at that point for two days and then began to decline until the evening of the 15th, when the fever entirely disappeared. At no time was the pulse above 108, and then only for two days, after which it was always below 100, and generally below 95. The delirium and diarrhoea were moderate. The patient recovered quickly from the typhoid fever proper, and by the 1st of May was able to walk readily from room to room. Recovery seemed complete. On the evening of the 1st, however, a cough of a croupy nature set in, accompanied with marked irritability of the larynx and pharynx. Causticum, at one time, and bryonia at another, relieved this symptom for a day or so, but there was soon a return of the cough in an aggravated form, this time associated with marked dyspnoea on inspiration, increased difficulty in swallowing solid food, hoarse voice and mucus expectoration. There had been marked stridor in sleep. The laryngoscope showed marked congestion of the walls of the larynx and of the bands, with almost total closure of the glottis on both inspiration and expiration. Owing to the condition of the patient, it was impossible for me to get more than a very imperfect view of the lower portion of the larynx. The epiglottis was not affected, and the larynx was clear of obstruction down to the cords. I hesitatingly made a diagnosis of acute laryngitis, with possible oedema of the cords, or an abscess in their vicinity, causing the closure of the glottis. That there might also be an element of paralysis in the case did not escape my attention. Remedies were unavailingly tried, and it soon became apparent that the patient must suffocate if relief did not soon come to his aid. On the morning of the 4th I summoned Dr. C. M. Thomas, in consultation, with the request that he come prepared to introduce the tracheotomy tube. Dr. Thomas complied, and in the afternoon operated under cocaine. Immediately on the introduction of the tube the symptom of dyspnoea subsided. No complications retarded the recovery of the lad from the effects of the operation. On the 14th Dr. Horace F. Ivins was called into the case. Between the date of the operation and the first visit of Dr. Ivins the laryngoscope was not used. Dr. Thomas and I had agreed to rest on our diagnosis of bilateral paralysis of the abductors of the vocal cords, and to be content for a couple of weeks to allow the boy to regain his strength before treatment was directed to the paretic or other existing conditions. Dr. Ivins agreed with the diagnosis of paralysis, but was enabled to see a growth of a polypoid appearance attached to the right ventricular band, and blocking up the posterior portion of the glottis. It was evidently this growth which, under the difficulty attending

my examination prior to the tracheotomy, I mistook for a stenosis from œdema or abscess.

I will now permit Dr. Ivins to describe the condition in which he found the lad, and to comment fully upon the case. Prior to the treatment instituted by Dr. Ivins for the removal of the tumor, I had considerable difficulty with a muco-sanguino-purulent discharge, which soon so blocked up the outer tube, in spite of the exercise of great care, as to nearly strangle the patient before I could reach him. I had also to contend with an existing or a probable forming perichondritis. It afforded me the greatest pleasure to soon notice the gradual decline and the final total disappearance of the symptoms which, for a while, it was feared were those of cricoid necrosis.

REMARKS BY DR. IVINS.

On the 15th of May, at the request of Drs. Charles M. Thomas and G. Maxwell Christine, I examined Master P. As already stated, the tracheotomy tube, through which the patient breathed freely to the exclusion of the natural passages, was in position. Respiration through the larynx was impossible for one minute, even with the greatest effort. The voice was practically lost, though upon forced expiration with closed, fenestrated canula the young man was able to speak two or three words in very rough, sepulchral tones, similar to those heard after total extirpation of the larynx when the voice is produced by the vibration of folds of adventitious mucous membrane and not by the vocal or even the ventricular bands.

The laryngeal mirror presented a very marked picture. The epiglottis, ary-epiglottic folds, and supra-arytenoid cartilages appeared normal; the left ventricular band was swelled, and by its size prevented a view of the corresponding vocal ligament; the right false vocal band was in the same thickened condition, and likewise hid the true one below it. In addition there projected from the free edge of the right ventricular band, near its posterior extremity, a little pedunculated, polyp-like mass about the size of a large pea. On account of the swelling it was impossible to see the glottic opening, but during vocalization and forced inspiration the ventricular bands vibrated sluggishly.

The condition was evidently inflammatory, but it was not easy to determine the exact pathological changes, for the absence of fever and of pain in the laryngeal region—the latter not resulting even from firm pressure—seemed to contradict the other indications of

perichondritis. The inflammatory condition was quite sluggish and there was no cedema; on that account cedematous laryngitis could be excluded. There was neither bloody nor purulent discharge either from the larynx or trachea to indicate the presence of ulceration, but the granular mass suggested a past abrasion, or ulceration of the surface, or the existence of a sinus. The possibility of the mass representing a non-suppurative papilloma was not overlooked. The absence of pain and rise of temperature and the bilateral nature of the swelling did not indicate abscess formation.

It was decided to give ferrum iodatum internally, and to make applications of iodide of glycerine locally.

On the 20th the condition had improved slightly, the swelling of the ventricular bands had decreased, and breathing with closed canula seemed slightly less laborious. The polypus was about the same.

On the 28th the slight improvement noted had disappeared and the larynx presented well-marked tenderness to pressure. Internally the right side of the larynx was evidently more swelled, the arytenoid on that side appeared puffy, but the polypus was smaller. A diagnosis of perichondritis now seemed quite easy; suspicion pointed to the right arytenoid and to the plate of the cricoid. The internal remedy was changed to hydrastin mur., owing to a very abundant, bloody, muco-purulent discharge from the canula. Under the influence of this remedy the discharge soon ceased. The local applications of iodized glycerine were discontinued on account of the annoyance and irritation to the patient.

On the 18th of June the severe symptoms had nearly passed away; respiration was easier, and the voice a little stronger. The polypus was smaller, and decrease in the swelling of the ventricular bands made it possible to see the edges of the congested vocal ligaments anteriorly; the arytenoid had resumed its normal form. I did not see the case again until the 29th of August, when there was neither pain, tenderness, fever, nor cough; the voice was still rough and deep; laryngeal respiration was stridulous and only possible for a couple of minutes. The mucous membrane was nearly normal in color, with some congestion of the vocal bands. Anteriorly the latter separated somewhat during inspiration and approximated fairly well during vocalization. The evident motion of the vocal bands and arytenoid cartilages rendered improbable crico-arytenoid ankylosis. The one condition which masked the others and which assumed chief prominence was the presence of a large, gray, granular—papilloma—

tous (?)—mass about as large as a cherry. It filled the posterior two-thirds of the laryngeal vestibule, rested on, perhaps between, the vocal bands, and reached to the summits of the cartilages of Santorini, and to the upper level of the ary-epiglottic folds.

On the first day of September a series of probings was instituted for the purpose of accustoming the interior of the larynx to the presence of forceps. By the 14th the larynx was sufficiently insensitive, with the aid of cocaine, to permit the removal of two small pieces of the growth, but the latter was so large that the tube forceps would not grasp it, and the larynx was not tolerant of larger instruments. On the 17th, with the aid of Fouvel's antero-posterior forceps, the neoplasm was removed in four large pieces. The combined mass measured 11 mm. (nearly seven-sixteenths of an inch) in diameter. Respiration and vocalization improved at once.

On the 8th of October there was no indication of a return of the neoplasm; the vocal bands were still congested, but moved very considerably, although they could not be separated more than three lines even on forced inspiration, leading to a confirmation of the original diagnosis, viz.: abductor paralysis. From beneath the vocal bands the mucous membrane projected on each side; a probable inflammatory thickening of this tissue over the body of the vocal muscle, or an hypertrophy of the muscle itself. On account of this, iodine and glycerine were used locally and ferrum iod. internally.

